IN THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (currently amended) A hearing aid ~~with~~ comprising a microphone system ~~(1)~~ and a subsequent analog/digital converter ~~(5)~~, wherein the microphone system ~~(1)~~ is encapsulated in an electromagnetic shielding case ~~(3)~~ forming a shielded microphone system unit, and further wherein the analog/digital converter ~~(5)~~ is mounted on an ~~outside~~ outer surface of the electromagnetic shielding case ~~(3)~~.

2. (currently amended) The hearing aid as claimed in claim 1, wherein the analog/digital converter ~~(5)~~ is encapsulated in a converter shielding case ~~(7a, 7b)~~ and is mounted to said outer surface via said converter shielding case which is set to the electrical potential of the electromagnetic shielding case ~~(3)~~ of the microphone system.

3. (currently amended) The hearing aid as claimed in claim 1, wherein the microphone system ~~(1)~~ and the analog/digital converter ~~(5)~~ are detachably combined in a modular manner.

4. (canceled).

5. (currently amended) The hearing aid as claimed in claim 2, wherein the microphone system ~~(1)~~ and the analog/digital converter ~~(5)~~ are detachably combined in modular manner.

6. (currently amended) The hearing aid as claimed in claim 1 ~~2~~, wherein said analog/digital converter comprises

first and second analog inputs ~~(E_1, E_2)~~, said first analog input ~~(E_1)~~ having a first input impedance ~~(Z_1)~~ and a first input gain ~~(G_1)~~ , said second analog input ~~(E_2)~~ having a second input impedance ~~(Z_2)~~ and a second input gain ~~(G_2)~~, and wherein ~~either~~ at least one of said first and second input impedances ~~(Z_1, Z_2)~~ and of said first and second input gains are respectively different from one another ~~or said first and second input gains (G_1, G_2) are different from one another~~.

7. (canceled).

8. (previously presented) A hearing aid comprising:
a microphone;
an electromagnetic shielding case for encapsulating said microphone; and
an analog/digital converter mounted on an ~~outside~~ outer surface of said electromagnetic shielding case and electromagnetically shielded from said microphone.

9. (previously presented) A hearing aid comprising:
a microphone;
an electromagnetic shielding case for encapsulating said microphone; and
an analog/digital converter mounted in such a manner that it is electromagnetically shielded from said microphone.

10. (new) The hearing aid as claimed in claim 9, wherein said analog/digital converter is fixed to a flexible sheet coated with a conducting path of the digital output of said converter.

12. (new) The hearing aid of claim 9, wherein an

analog output of said microphone system is led through said shielding case of said microphone system towards said flexible sheet.

13. (new) A microphone system with a size for applying in a hearing aid comprising:

a microphone system encapsulated in an electromagnetic shielding case; and

an analog/digital converter mounted on an outer surface of said electromagnetic shielding case.

14. (new) The system of claim 13, wherein said analog/digital converter is mounted on said outer surface via an electromagnetic shielding case of said analog/digital converter.

15. (new) The system of claim 13, wherein said analog/digital converter is fixed to a flexible sheet having a conducting path connected to the digital output of said converter, said sheet with said converter being encapsulated in an electromagnetic shielding case mounted to said outer surface.

16. (new) The system of claim 13, further comprising an electrical connection from an output of said microphone through said shielding case of said microphone to said flexible sheet.